

Pand D A



NEW YORK MARKET

Prices Rule Strong — Outlook Good For Continuance of High Values

Sales in the New York market for the week ending May 20 were 445,(dr) bags Cuban and Porto Rican and 900

tons St. Croix and San Domingo.
Willett & Gray's report states that
the business of the week was on a par with that of the preceding weeks of the last two or three months. In part the report says:

"The weekly cable from Cuba, giv ing increased receipts, brings the present visible crop up to within 120,736 tons of the last crop, at corresponding date. Increased offerings of both Cubas and Porto Ricos at 3 %c c. & f. and 4.89c followed, and a seller accepted from an operator 1-16c per 1b. conces-sion for 8000 bags Cubas, affoat, at 3.13-16e c. & f., making market quota-tion again 4.83e per lb. Ups and Downs

"On Wednesday morning the market was easier, with several sellers at 4.83c, but on receipt of several cables from Cuba reporting heavy rains in Cuba, with consequent interruption in grinding, the market became firmer

with nothing for sale under 4.89c.
"Futures for June shipment were, however, well sustained and sold at an advance to 4.95c for 35,000 bags to an outport. Late June Porto Ricos sold Howell at the same figure.

"Today the unfavorable Cuban news had further effect, nearby sugars sell-ing to operators at 4.89c and June ment at 4.95c.

Notwithstanding that English statistics show that Great Britain has al ready secured sufficient raw supplies for several months to come, that country continues the policy of constantly looking further ahead at present basis of values, which are in her favor in Cuha for raw sugar, as against other

sources of supply.
"Unconfirmed rumors place English
purchases during the week of Cubas for June-July shipments at 30,000 tons, at 3.75c f. o. b. Cuba. Enclish Consumption Large

"The consumption of sugar in Great Britain is unusually large, 187,000 tons raw value, including molasses, or 161, were unfavorable conditions, both at 984 tens refined for April, but due per the beginning and end, owing to rain, haps to an expectation of an increase of duty on sugar which, however, was the southeast, made much or the land

bring down the "Budget" the early sections beet seeding is well under way.
part of May, an in this Budget it is Everywhere the lack of labor and anialso usual to announce changes in tariff rates.

"Last year, instead of an increase from duty at the front and sent home."

fell off materially, but when it was known that the duty would re-

"In this connection, our Liverpool hasy disposing of their purchases, and demand has slackened.

Cuban Mills Busy 'An the Cuba centrals continue working in larger numbers than last year, the weekly receipts and stocks make larre increases, the stocks in Cuba and the United States together are now 1,138,229 tons, against 1,107, 626 tons at this time last year.

'3,000 tons full-duty sugar were sold for use for exports this week at 4.89c to 4.95c per lb. duty paid, for Cubas or Porto Ricos.

"Atlantic port receipts for the week 62,000 tons and stock increases 22,197 tons to 351,263 tons, against 314,461 tons last year. "Measrs Guma-Mejer wired the Cu

against 66 last year and 111 in 1913. there is much scarcity of lubor to handle the growing beet crop.

Befined "All list prices have remained at 6.00c, less 2% during the week, although it has been possible, in instances at least, to have orders booked at 5.90c less 2 per cent, but it becomes more difficult to do this at the close, and there is some suggestion of a higher white sngar supply. Some of the Javas list price ere long. The Penusylvania are white sngars and could be used as

are rather disappointing because of the always the possibility that our governcontinued usually cold weather of this month of May.

"Export business with France has been put through to the extent of 10, 000 tons refined at understood 4.00c to 4.70c per lb. f. o. b., net cash, in bond, acres of beets for the 1915-16 campaign. and further enquiries are on the mar-

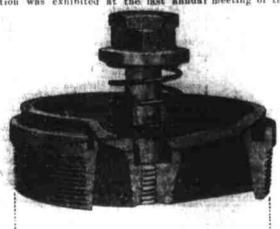
Cuban Weather 'According to special reports received by us from all parts of the Sugar Company had contracted for Island for the week ending May 14, 33,350 acres, 11,200 of which were 1915.—Extremely hot weather has planted.

warked the week in many sections. Notes from the press: From all secof all kinds. Light to moderate rains the beet crop is growing splendidly

From Germany, F. O. Licht reports heavy yield.

WILLET & GRAY ON Oahu Engineer Invents High-Lift Pump Valve

E. M. Scoville, consulting engineer of the Oahn Sugar Company, has invested a new valve for use on the Biedler pump. A sample of his invention was exhibited at the last annual meeting of the Hawaiian Engineering Association. It has now



been in use on the big Biedler high lift pumps in Waipahu Gulch for ten months and has stood the test of practical work in a highly satisfactors manner. The Riedler pump, manufactured by the

Affis - Chalmers Company of Chicago, has proved for superior to ther high lift pumps because it was fitted with mechanical valves, So long as these worked satisfactorily it deliv-ered water with higher efficiency than other types not provided with mechanical valves.

The Hall valve Scoville Valve Which Increases Efficiency of Ried-which is the one which has been the type com ler Pumps monly used on Riedler pumps, has to be reground at frequent intervals. Its shank, or movable bearing, is very narrow, allowing considerable play and wear after long use. Also the Hall valve delivers its water at right angles to the axis of the valves, so that where two valves are side by side on one cylinder head the streams from each meet in the same plane, retarding deivery and reducing the working efficiency of the pump.

Better Than Hall Valve The new Scoville valve has a long shank. The valve seat is beveled so that the stream from adjoining valves do not impinge against one another, head-on, as is the case in the Hall valve. Furthermore, just outside the bearing sent there is a circular rubber washer which fits into a channel in

the metal, extending about a quarter inch above.

The valve seat is metal. When the valve closes the back pressure forces the rubber cellar against the outer edge of the seat and prevents leakage. The beveled metal valve seat may thus become lined and channeled from use

without actually lowering the officiency of the delivery.

A Seoville valve on the big Reidler pump at Waipahu has been estimated to have opened and shut twenty-nine million times in the ten months sines its was installed, without impairing its working efficiency.

Experts Approve Invention

Mr. Strothingham, head engineer of the Allis-Chalmers Company, and the chief engineer of the International Pump Company have both pronounced the Scoville invention a marked improvement over any form of mechanical valve previously devised.

Catton, Neill & Co. of this city have been appointed Mr. Scoville's agents for the placing of this invention, which is destined to find wide use wherever the Riedler pump is used.

under date of April 23: In spite of some cold, rainy weather, warm, sunny days predominated during the past week, and on the whole, conditions favored field unworkable. But, for the greater part, It is the usual enstom in England to field work was favored and in some

being expected, it was thought the sugar duty would be reduced, and conorderly course. The work is, however, easier than it main unchanged, the consumption increased rapidly, the figures for May reaching 218,751 tons raw or 196,092 as dry chough, so that one hopes that

the warm, dry weather will continue "In this connection, our Liverpool and permit the present backwardness correspondents write under date of to be made up. The winter grain came through the cold in good shape, so that made in the duties, dealers are now little of it will be plowed under and replaced by beets. A reliable estimate of the size of the sowings is very difficult this year as many beets are being cown as a speculation, without con tracts, something done to but a small extent heretofore. However, a decrease of twenty per cent from last year still scens probable.

Opening the Dardanelles The London Mail of May 6 says:

Prohibition of imports continues, an it is believed that government pur chases will be sufficient to supply our refiners with raw sugars until October were 84,197 tons, against meltings of or November. It is quite impossible to say, even approximately, what has been the extent of government purchases. Personally we are inclined to think they have not bought more than 250,000 ton han conditions late yesterday as follows: Heavy rain generally. Centrals some quarters that they have secured closing rapidly; 147 Centrals working, as much as 400,000 tons, besides further supplies from Cuba. As our reffners can 'Advices from Germany report that only supply (roughly) half of our requirements in the shape of white su gars, it will be necessary to import largely to supply the deficiency.

"It is hoped that the Dardauelles will be cleared for traffic within two or three months, and the effect of this operation would probably be to release 150,200,000 tons of Russian crystals which would be a useful addition to our list price ere long. The Pennsylvania are white sugars and come or user. Company, Philadelphia, advanced to refined sugar. Lastly, the Mauritius crop, which commences in August, has crop, which commences in August, has so far not been dealt with, and there is ment may again secure practically the

whole crop, as was the case last year. To May I the Great Western Sugar Company had contracted for 127,500 planted. The Billings Sugar Company had contracted for 24,060 acres, 8,000 of which were planted, and the Scottsbluff

and has interfered somewhat with work tions of California come reports that have also occurred at many points, cs Near Visalia the April rains and weathpecially in the east. The heaviest pre er conditions since have greatly imcipitation reported was about 2,00 proved crop prospects. Early in April inches in 24 hours, at Camaguey, Under beets were knee high and on May 6 these conditions harvesting and plant roots planted in Pebruary were already ing are making fair but irregular proteinches in circumference and gress. Conditions are, however, very tavorable for the growth of next crop ternvin is now expected to start slicing cane, which has made excellent pro- about August 1, or a month earlier than last year. Beets promise to give a

The sugar bag situation will be good if nothing happens to the Siberia en route from the Orient, George H. Robertson stated yesterday. "The Si-beria has already sailed from Hong-kong and we know that a big consignment of burlaps is aboard her. Should any contingency arise to prevent her arriving here the twenty-second, the plantations will have to shut up shop. There are just enough bags on hand to run the mills comfortably until the Siberia gets here and she has enough aboard to last us until the next consignment arrives.

BAG SUPPLY IMPROVING

FACTORS SHIPMENTS

The shipments of the Sugar Fators' Company to May 31 117,131 tons, according to Manager A. M. Nowell.



Fall upon distracted households when Cuticura enters.

All that the fondest of mothers desires for the alleviation of her skintortured and disfigured infant is to be found in warm baths with

And gentle anointings with Cuticura Ointment.



Record and Forecast of Hawaiian Sugar Crops as of Uneven Dates to May 3', 1915

The Hawaiian sugar plantation fiscal year is from Oct. 1 to Sept. 30.

There are forty five sugar mills in Hawaii. In addition thereto, there are seven independent cane planters, whose cane is ground on shares, who do business on such a large scale that their share of sugar is listed separately. Planters without mills or not grinding their own cane are indicated hereunder by a ".

Statistics are of tons of 2000 lbs, each. At this date all plantations are grinding.

NAME OF PLANTATION.	p-of 3914. Tone of Sugar Oct. 1, 1913, to Sept. 30, 1914.	op of 1915. Agents and Sugar Sactor's estimate as of Jan. 1, 1915.	p of 1915-Tons of Sugar thipped, Oct. 1, 1914, to May 31, 1915.	Grinding 1915 trop Regan
*Apokaa Sugar Co	925	450	22	November 24, 1914.
*Estate V, Knudsen Ewa Plantation Co	992	30,000	572 18,526	December, 7, 1914.
*Gay & Robinson	29,563	5,000	4,765	January 2, 1915.
*Grove Farm Plantation	5,172	4,800	3,013	terror sec
Hawaiian Agricultural (o	17,890	18,000	6,136	Grinding.
Hawaiian Commercial & Sugar Co	56,500	55,000	41,237	November 16, 1914.
Hawniian Sugar Co	26,828	24,000	14,714	November 18, 1914.
Hawaii Mill Co	3,601	3,000	1,693 5,613	January 1, 1915.
Halawa Plantation	7.057	13,590	1,000	
Hakalau Plantation Co	2,087 16.863	16,500	10,119	January 4, 1915.
Hila Sugar Co	18,937	13,300	10,521	January, 1915, first week.
Honokaa Sugar Co	7,272	10,000 }	10,174	January 11, 1915.
*Pacific Sugar Mill.	6,250	7,000 \$	4,390	Crop ground by Honokaa Sugar Co
Hawi Mill & Plantation Co	6,745	8,600	6,160	January 8, 1915. January 15, 1915.
Hutchinson Sugar Plantation Co	8,567	9,000	1,206	Skudary 10, 1010.
Honolulu Plantation Co	5,909	19,000	11,208	November, 1914.
Kilanea Sugar Plantation Co	20,154	5,800	3,291	December 20, 1914.
Kipahulu Sugar Co	6,426 2,126	2,500	1,684 3,500	December, 1914.
Karleku Plantation Co	6.225	5,500	6,470	2000 60 600
Kahuka Plantation Co	8,193	7,000	5,361	October 19, 1914.
Kolon Sugar Co	8,572	8,500	9,692	December 14, 1914.
Kekaha Sugar Co	17,153,	15,100	2,966	January 25, 1915. December, 1914.
Kena Development Co	4,475	5,500	488	recember, avan
Kaiwiki Sugar Co	3,477	7,000	3,571	
Kukaiau Plantation Co	6,932 3,225	3,700	2,279	
*Koolau Agricultural Co	1,137	600	7,837	Variable Control
Laupahoehoe Sugar Co	11,193	11,300	13,375	December, 1914.
Libue Plantation Co	22,065	20,000	1,038	December, 1914.
*Laie Plantation	1,600	1,600	5,682	1
Makee Sugar Co	10,860	10,000	26,228	November 23, 1914.
Mani Agricultural Co	33,660	15,000	1,000	January 6, 1915.
Niulii Mill & Plantation	16.345 2,700	2,500	1,000	
Oahu Sugar Co	. 33.474	28,000	18,871	December 1, 1914.
Olaa Sugar Co	25,736	32,000	14,616	December 7, 1914.
Olowalu Co	2,027	1,850	1,618	January 2, 1915.
Onomea Sugar Co	19,600	18,000	11,255	January 15, 1915. January 8, 1915.
Pasuhau Sugar Plantation Co	10.767	16,000	8,235	November 19, 1914.
Pieneer Mill Co	28,302	28,000	18,529	January 15, 1915.
Pepeekeo Sugar Co		10,500	6,100	January, 1915.
Prakea Plantation		3,000	1,717	December, 1914.
Wainkea Mill Co		14,000	9,316	December, 1914.
Wailuku Sugar Co		18,000	13,799	December 29, 1914.
Waialua Agricultural Co		31,000	16,261	December 9, 1914.
Waimen Sugar Mill Co		4,500	1,706	December 15, 1914.
Waianae Co		4,800	2,251	Tanaga 4 1015
Waimanalo Sugar Co		1,900	1,103	January 4, 1915.
Total	617,035	612,530	379,722	

SHARE SYSTEM OF SOUTH SUCROSE INCREASES IS A LOSING GAME

A scientific analysis of the cost of and 120 bushels of corn, worth gross \$560, or an average value of \$27.90.

The land owner's cost of production averages \$5 per acre rent, \$100; overseeing, \$60; one mule, its feed and care, \$150; use of implements and harness, \$20; house rent, \$24; fuel, \$12; pasturage, \$24; repairs and overhead charges, \$40; seed, \$22; bags and ties, \$9—a total of \$461 for half the crop.
The negro tenant supplies inbor, \$182;
COMPLAINTS OF FILLI and bags and ties, \$9, for his balf of the crop.

Share System Unprofitable possible under the share system to have few days of a special Philippine labor the best use made of the land. The commissioner for Hawaii to look after enough labor on crop production to been recruited by the Hawaiian Sagar tary country bring up the value of the land or the several months past. crops is to entirely diseard the share system and substitute corporation farming and the payment of each day that his duty will be to act as an intermediate between the laborers from the contractor who is building the law time to make the laborers from the contractor who is building the law time to make the laborers from the contractor who is building the law time to make the laborers from the contractor who is building the law time to make the laborers from the contractor who is building the law time to make the laborers from the contractor who is building the law time to make the laborers from the contractor who is building the law time to make the contractor who is building the law time the con

The average outlay persacre per an-num that the land owning planter would have to pay would be somewhat higher than under the half-share system, but in exchange he would get the can be settled out of court.

Shed interials are being assembly also in progress for other plantations. The itilo branch shops of the completion.

The itilo branch shops of the completion. tem, but in exchange he would get the can be settled out of court. He will probably have hi ters in Honolulu. more profitable.

CATTON, NEILL AGENTS

well as for Hawaii.

WITH HOT WEATHER

tenant farming in the cotton growing dry and hot for the whole group durstates recently conducted by the Coun- ing the past week. Kau is the only try Geutleman indicates that in the district which has had good rains, long run the Southern land owner Heavy showers in the forest belt above loses more than he makes by having Pahala have helped out the water supbis land worked on the share system.

The average negro tenant farm is again grinding full capacity. Elseis usually in cotton and the balance in learn. An average crop return in noris usually in cotton and the balance in learn. An average crop return in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in noris usually in cotton and the balance in learn in the Hilo district and prevent bealthy growth.

Whenever there is an outhreak of funding warmth and sunshine have many should call in an entomologist to diagthe dry weather does not effect this triully increased yields and purity in cotton and the balance in learn is in scientific than the district and prevent bealthy growth.

Whenever there is an outhreak of funding warmth and sunshine have many should call in an entomologist to diagthe dry weather does not effect this triully increased yields and purity in cotton and the plantation and the mill is in scientific that the cane in the Hilo district and prevent bealthy growth.

Whenever there is an outhreak of funding mal years is seven bales of cotton, year's crop except to help the sugar and all plantations will outturn more would not grow on the leaves and three and a half tons of cotton seed vields. Almost two-thirds of the en sugar than their original estimates clock them from the soushing if leaf tire Hawaiian crop is now bagged and called for. on its way to market.

TO LOOK AFTER THE

The appointment is expected in a The Planters' Association, and whose treat-

PLANTERS ON

A. Scott-Splendid Crop Outlook

day that the case in the Hilo district and prevent bealthy growth,

G. H. Robertson said that all cames 1916 fields are improving every day, are showing splendid sucrose. "It is The 1917 plant came is well started fungines to grow in, when it is in good humor," he said. their relitivation better in hand than has been the case at this season for several years. The streams are low, or at least some of them are, Mr. Scott said, but even should the harvesting COMPLAINTS OF FILIPINOS be delayed by shortage of flume water this might not be a serious matter considering the trend of the market and Manila Cablenews-American, May the probable maintenance of the price

Hilo is growing steadily and consisttenants can not be induced to spend the interests of the Filipinos who have ently as crop conditions in the tribut that enough orders are now on hand should grow, Manager Scott said. The this year. grow more than average yields. The planters' Association, and whose treat should grow. Manager Scott said. The only hope for that portion of the South ment in the sugar fields has been the federal building is well under way and the breakwater contractors are plant the breakwater contractors are plant the breakwater contractors are plant the breakwater for the Ewa Planta-It is understood that Dr. Alejandro ging none, getting ready to place the

termediary between the laborers from canses and road to the new what the liawaiian Sugar Company. Sunthere Islands and their employers. He has his work well along. The what dry indior orders in the way of rewil be given full power to act upon shed materials are being assembled placements and new machinery are

The bady of Mrs. Mary Anderson Smith, who died at the Queen's Hospital Saturday, was taken to San Francisco in the steamer Shinea Mary facture of which Catton, Neill and cisco in the steamer Shinyo Maru yes share of the trans-l'acific coaling and is offering. facture of which various, Nelli and Company are the exclusive agents, is terday morning. Mrs. Smith was re supply trade. With further patronal now installed in six mills in Hawaii moved from the Tenyo Maru two development and extension to connect and negotiations are in progress for its works ago when that steamer reached all the notate districts with the tree matter of the chamber of commerce at use elsewhere. This company has the agency for all the came countries as port from the Orient. The body was cent ints, a development which need a meeting held vesterday approved the agency for all the came countries as taken through on the through ticket be delayed but which is bound to come felder of the Paradise Tours Company, well as for Hawaii.

THE BLACK BLIGHTS OR FUMAGINES

Indirect Injury Due To Cloaking the Cane Leaves From Sunlight

Not Themselves Parasitic But a Sure Sign of Hoppers' and Pests

The influence of the fumagine fungi which grow on the surface of leaves in the excreted sugary juices from leafhoppers, plant-lice and other suckling insect pests of crops has been investigated by G. Nicholas, a French bot-

It has been generally held that the fumagine fungi are injurious because the thick black coating which they form on the leaves of coffee, cane and other plants are injurious chiefly because they hinder assimilation and res-piration. This idea was not based on any precise observations, so Nicholas undertook experiments to determine the exact injury that does take place. Scientific Results

The experimenter worked with or ange, oleander, olive, guava, gardenia and several ornamentals. Leaves covered with fumagine were divided in two, one half being freed from the fungus. The two halves or symetrical portions of them, were placed in glass tubes containing air of known analysis, saturated with moisture and containing eight to ten per cent of carbonic acid gas, from which all green plants compound starch and sugar in the presence of sunlight. Two analyses of the amount of gas removed by each balf of each leaf were made.

M. Nicholas found marked retardation of the life process of the leaf in all cases where the fumagine fungi were present. The adverse influence of the black coaling was in direct proportion to its thickness and density.

Black Blight Secondary
The fumagines or "black blights," as they are called in Hawaii, are en-tirely external to the leaves of plants. In habit they are "saprophytes," or microscopic plants living on dead food he distinguished from the "parasites," which get their food from living

Their presence indicates an epidemic of some insect pest which lives by sucking the juices from the leaves and stems of plants. In a cane field the black blight or fumagine on leaf and cane is a pretty sure indication of a new outbreak of leaf-hopper. On coftee the fumagine is a tell-tale on the presence of plant-lies, mealy-bugs,

Insect pests of this class make no se of the sugar in the plant juices which they suck. They are after the albumen in the plant juices. Straining the cane juice through its digestive apparatus the leaf-hopper uses the alhuminous portion of the cane juice to build up its own body tissues and exeretes the sugar in almost pure form as glucose. Bees, auts and other in-sects feed on the glucoes excreted and the fumagines grow rapidly in it. Tell-Tales for Pests

The average observer places more blame on the fumagine than on the insect pest which is the first cause of the damage to his crops. The botan The weather conditions have been Are Happy, Says Manager John ists have long known that the black blights are not parasitic but are only an index of the presence of a dangerout pest but they do injure the plants John A. Scott, of Hilo, stated yester screen the leaves from the sunlight

> hospers, aphis, torpedo bugs and other Not only is the 1915 crop good; the pests had not paved the way and provided a coating of glucose for the

WITH MILL ORDERS

J. Hedemann, manager of the Honolulu Iron Works, said yesterday warrant that the city to keep the shops busy for the rest of

pushed rapidly to completion.

Altogether, Mr. Scott said, Hilo has ager tocorge D. Russell has been here

The advertising and subscription com-